

COSTS OF ESTABLISHING A WALNUT ORCHARD  
IN SAN JOAQUIN COUNTY - 1983

PREPARED BY WALLACE R. SCHREADER, FARM ADVISOR

University of California Cooperative Extension  
San Joaquin County  
420 S. Wilson Way  
Stockton, California 95205

UC Cooperative Extension

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This compilation of sample annual costs of establishing a walnut orchard in San Joaquin County is based on the following assumptions:

Labor is computed at \$5.50 per hour for skilled and \$4.50 per hour for unskilled. This includes Workmen's Compensation, Social Security, Unemployment Insurance, and other benefits.

The planting is assumed to be 80 acres with 48 trees per acre, planted on 30-foot squares. The trees are nursery stock with Paradox rootstock. The cultural practice is clean cultivation and surface irrigation.

All equipment is assumed to be new at current values. A sprayer, pruning tower with tools, and a buckrake are added in the fifth year.

Depreciation is calculated on a straight-line basis, and interest is calculated on 12% of one-half the initial value.

Table 1. WALNUT ORCHARD CAPITAL INVENTORY AND NON-CASH FIXED COSTS PER ACRE

INVENTORY	CAPITAL INVESTMENT	INVESTMENT PER ACRE	EXPECTED LIFE	FIXED COSTS PER ACRE		TOTAL COSTS PER ACRE
				INTEREST	DEPRECIATION	
LAND	\$440,000	\$5,500.00	--	\$660	--	\$ 660
SHOP BLDG. & TOOLS	30,000	375.00	20	23	19	42
IRRIGATION SYSTEM	20,000	250.00	20	15	13	28
EQUIPMENT						
50-HP Wheel tractor	17,825	222.81	10	13	22	35
10' Disc (offset)	4,830	48.30	10	3	5	8
10' Cultipack	3,400	42.50	10	3	4	7
Lister, 4-row	1,840	23.00	10	1	2	3
12' Float	1,450	18.13	10	1	2	3
Trailer sprayer (200 gal.)	2,875	35.94	10	2	4	6
Pickup truck	10,350	129.38	5	8	26	34
12' Roller	1,200	15.00	10	1	2	3
Orchard sprayer	20,000	250.00	15	15	17	32
Pruning tower & tools	10,000	125.00	5	8	25	33
Buck rake	1,100	13.75	10	1	1	2
TREES	\$1,115,280	\$13,941.00		\$836	\$697	\$1,533
<p>The value of the trees is shown as the total accumulated costs through the first nine years at which time gross income approximates total production cost.</p>						
TOTALS	\$1,680,150	\$20,989.81		\$1,590	\$839	\$2,429

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	Year								
	1	2	3	4	5	6	7	8	9
Yield - tons					.25 ton	.5 ton	1 ton	2 tons	3 tons
Gross income at \$1,000/ton					\$ 250	\$ 500	\$ 1,000	\$ 2,000	\$ 3,000
Land preparation	\$ 100								
Plant & stake	62								
48 trees @ \$9.75 ea.	468								
48 stakes @ \$2 each	96								
Tank irrigate	37								
<b>TOTAL PLANTING COSTS</b>	<b>\$ 763</b>								
Fertilize	--	\$ 12	\$ 12	\$ 8	\$ 14	\$ 29	\$ 29	\$ 29	\$ 29
Dormant prune & remove brush	--	31	40	45	70	70	70	70	70
Train, prune, & tie	27	27	14	--	--	--	--	--	--
Cultivate	31	31	31	31	46	46	46	46	46
Hoe	9	9	9	9	9	9	9	9	9
Irrigate	34	34	37	42	60	74	87	87	87
Spray	23	26	58	39	93	93	93	93	93
Misc. cultural costs	44	17	19	18	29	31	32	32	32
<b>TOTAL CULTURAL COSTS</b>	<b>168</b>	<b>187</b>	<b>220</b>	<b>192</b>	<b>321</b>	<b>352</b>	<b>366</b>	<b>366</b>	<b>366</b>
<b>TOTAL HARVEST COSTS</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>125</b>	<b>250</b>	<b>180</b>	<b>360</b>	<b>540</b>
Miscellaneous overhead	56	56	56	56	75	75	75	75	75
Taxes	60	60	60	60	90	90	90	90	90
Depreciation	97	97	97	139	475	571	676	624	816
Interest	729	1050	1127	1337	1154	1269	1395	1503	1561
<b>TOTAL OVERHEAD COSTS</b>	<b>942</b>	<b>1263</b>	<b>1340</b>	<b>1592</b>	<b>1794</b>	<b>2005</b>	<b>2236</b>	<b>2292</b>	<b>2542</b>
<b>TOTAL COST PER ACRE</b>	<b>1873</b>	<b>1450</b>	<b>1560</b>	<b>1784</b>	<b>2115</b>	<b>2607</b>	<b>2782</b>	<b>3018</b>	<b>3448</b>
<b>CREDIT FOR CROP</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>125</b>	<b>500</b>	<b>1000</b>	<b>2000</b>	<b>3000</b>
<b>NET COST PER ACRE</b>	<b>1873</b>	<b>1450</b>	<b>1560</b>	<b>1784</b>	<b>1919</b>	<b>2107</b>	<b>1782</b>	<b>1018</b>	<b>448</b>
<b>ACCUMULATED COST PER ACRE</b>	<b>\$1873</b>	<b>\$3323</b>	<b>\$4883</b>	<b>\$6667</b>	<b>\$8586</b>	<b>\$10693</b>	<b>\$12475</b>	<b>\$13493</b>	<b>\$13941</b>